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#### NOTES AND NEWS

NEW PLANT DISTRIBUTION RECORDS FROM THE SOUTHWESTERN UNITED STATES AND NORTHERN MEXICO. — Recent collecting activities in the Southwestern United States and northern Mexico have turned up several new or otherwise significant plant distribution records. Some of these have developed significance after passage of the Endangered Species Act and the subsequent publication of state lists of threatened or endangered species.

#### FABACEAE

*Astragalus musimonum* Barneby. Arizona, Mohave Co., ca. 30.5 km S of St. George, Utah, at 1350 m on the W slope of Segmuller Mountain above Mokiah Wash, on calcareous bank along road in piñon-juniper community, R. Spellenberg, R. Delson, J. Syvertsen 3182, 20 May 1973.

In *Arizona Flora* (T. H. Kearney and R. H. Peebles. 1951. Univ. Calif. Press) this species was listed as possibly occurring within Arizona, the record based on a collection from the same vicinity (Ripley and Barneby 4321) as our recent collection. Their collection was immature and Barneby was uncertain of the correct identity of that material. In the supplement bound with a later edition of *Arizona Flora* (1964: p. 1054) Barneby concluded their collection was misidentified, actually representing *Astragalus amphioxys* Gray var. *modestus* Barneby. He maintained this opinion in his monumental "Atlas of North American *Astragalus*" (1964. Mem. New York Bot. Gard. Vol. 13). Our collection "keyed" easily to *A. musimonum* since it had good fruit and a few flowers. The identification was confirmed by Barneby. In our correspondence regarding the collection he noted that his and Ripley's earlier collection had been lost. The species appears in the 7/1/75 Federal Register as "threatened" in Nevada.

*Petalostemum scariosum* (Wats.) Wemple. New Mexico, Socorro Co., 1.6 km S of La Joya Game Refuge exit on IH-25, R. Spellenberg, J. M. Willson 4228, 8 Jul 1976.

The species is listed as "endangered" in New Mexico in the 6/16/76 Federal Register. In a recent revision of the genus (D. K. Wemple, 1970, Iowa State Coll. J. Sci. 45:1-102) all collections cited were made about 70 years ago from only two stations near the Rio Grande in Bernalillo and Valencia counties. However, we find the species to be more widespread, occurring from the Laguna Indian Reservation in eastern Valencia Co. to the Sandia Mountains in central Bernalillo Co., southward to east of San Antonio in central Socorro Co. The species may have been orig-

inally restricted to eroded tops and slopes of sandy-clay bluffs but seems to respond positively to disturbance, occurring sporadically in loose sand near roadsides and other sandy areas now believed to have been degraded by domestic grazing. Observations made in the spring of 1977 on a population in central Socorro Co. indicate that the species is not, or but little, grazed by cattle and horses on otherwise heavily used rangeland.

#### NYCTAGINACEAE

*Selinocarpus palmeri* Hemsl. Coahuila, 4 km by winding road E of El Coyote at NW end of Sierra de Solis, 25°40'N lat., 103°10'W long., elev. ca. 1100 m, on a large, almost pure gypsum outcrop, *R. Spellenberg* and *J. Syvertsen* 3768, 16 Aug 1974.

Until this new collection the species was known from only two others (*Palmer* 1118, 1119, May 1880, from San Lorenzo de Laguna). But perhaps more important is evidence of the precise location of Palmer's "San Lorenzo de Laguna", not to be located on modern maps. McVaugh (1956, Edward Palmer: plant explorer of the American West. Univ. Okla. Press) indicated that it should be in the near vicinity of the site from which our collection was taken. That our locality is also that of Palmer is supported by the occurrence of the newly described *Euphorbia fruticulosa* Boissier var. *hirtella* M. C. Johnston (*Wrightia* 5:141) with the *Selinocarpus*, our collection providing the holotype. M. C. Johnston (pers. comm.) subsequently discovered a specimen of this variety in the Gray Herbarium collected by Palmer at "San Lorenzo de Laguna".

#### OPHIOGLOSSACEAE

*Botrychium matricariifolium* A. Br. New Mexico, Catron Co., Gila Wilderness, ca. 16 km by air ESE of Mogollon, on Crest Trail 182, 4 km SE of Sandy Point, in mature spruce-fir-aspen forest, N slope, 3033 m elev., *R. Spellenberg, J. Reitzel, D. Hill* 4528, 5 Sep 1976.

This record is the first for this species in the state and is the southernmost record for the genus in New Mexico.

#### POACEAE

*Muhlenbergia villosa* Swallen. New Mexico, Otero Co., Otero Mesa NE of Orogrande, Sec 7 or 18, T24W, R11E, elev. 1775 m, *R. Spellenberg* 4565, 24 Sep 1976.

The species is said to be endemic to Texas and to occur there only extremely locally, apparently confined to gypsum, near the SW corner of the panhandle (F. Gould. 1975. *The Grasses of Texas*. Texas A & M Press). The newly discovered population was vigorous, on soil derived from limestone, occurring in scattered but dense patches over an area of about 25 m<sup>2</sup>. The species is listed in the 6/16/76 Federal Register for Texas as "endangered".

*Urochloa panicoides* Beauv. New Mexico, Las Cruces, New Mexico State University campus, weedy lawn, *R. Spellenberg* 4480, 26 Aug 1976.

Mr. José Valls, a student of Dr. Frank Gould, kindly identified this collection. It appears to be the first U. S. record for this Asian and African grass, now introduced elsewhere in warm parts of the world. At this point it appears to be only adventive. — RICHARD SPELLENBERG, Department of Biology, New Mexico State University, Las Cruces 88003.

IRREGULARITY OF PINYON CONE PRODUCTION AND ITS RELATION TO PINYON CONE MOTH PREDATION. — *Eucosma bobana* Kearfott (Lepidoptera: Tortricidae) larvae are prey-specific predators of maturing ovulate cones of *Pinus edulis* Engelm. and *P. monophylla* Torr. & Frem. (*Powell, Hilgardia* 39:1-36. 1968). Thus the number of ovulate cones annually produced in pinyon woodlands may determine, in part, the potential population densities of cone moths. In turn, the number of pine cone